

Mail Stop Appeal Brief Patents
PATENT
0540-1028

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE
THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Thierry KLETHY et al. Conf. 4670

Application No. 10/586,483 Group 1791

Filed: January 30, 2007 Examiner Michael Tolin

METHOD FOR MAKING A REINFORCEMENT PROVIDED WITH AT LEAST ONE ADHESIVE SURFACE CAPABLE OF BEING REPOSITIONED AND RESULTING REINFORCEMENT

APPEAL BRIEF

MAY IT PLEASE YOUR HONORS:

This is an appeal of the final rejection of claims 1-6 and 8-13 by the Official Action mailed March 18, 2010.

KLETHY 10/586,483
Attorney Docket No. 0540-1028

(i) Real Party in Interest

The real party in interest in this appeal is the assignee, Saertex France of Brangues, France.

KLETHY 10/586, 483
Attorney Docket No. 0540-1028

(ii) Related Appeals and Interferences

None.

(iii) Status of Claims

Claim 7 was cancelled. Claims 1-6 and 8-13 are pending and rejected. Claims 1-6 and 8-13 were rejected by the Official Action mailed March 18, 2010 (the "Official Action"). The final rejection of claims 1-6 and 8-13 is being appealed.

KLETHY 10/586,483
Attorney Docket No. 0540-1028

(iv) Status of Amendments

No amendment has been filed subsequent to the Official Action finally rejecting claims 1-6 and 8-13.

(v) Summary of Claimed Subject Matter

Claims 1 and 11-12 are independent.

The invention, as recited by each independent claim is a process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices (specification page 1, lines 5-12; page 3, lines 27-32).

Please note that the application does not include drawing figures.

In general, in the present invention, the problem being solved is how to maintain an armature being placed in a mould to have the placed armature correctly positioned and to further maintain the correct positioning while closing of the mould.

In a nutshell, the present invention's solution is to deposit, on at least one of the exterior surfaces of the armature material, a repositionable glue to form a glue tack with the mould, the glue tack holding the armature in position within the mould.

Claim 1

The invention, as recited by claim 1, comprises the steps of: preparing a fiber-based material (specification page 1, lines 5-9, lines 20-25; page 4, lines 5-9), and depositing a repositionable glue on at least one exterior surface of the material thus obtained (specification page 1, lines 5-9; page 4, lines 4-9).

Claim 11

The invention, as recited by claim 11, comprises the steps of: preparing a fiber-based armature (specification page 1, lines 5-9, lines 20-25; page 4, lines 5-9), depositing a repositionable glue on an exterior surface of the armature (specification page 1, lines 5-9; page 4, lines 4-9); placing the armature in a mould with the glue holding the armature in position within the mould (specification page 5, lines 3-29; page 7, lines 14-20); and injecting resin to flow through fibers of the armature (specification page 5, lines 30-31).

Claim 12

The invention, as recited by claim 12, comprises the steps of: preparing a fiber-based material (specification page 1, lines 5-9, lines 20-25; page 4, lines 5-9); depositing a repositionable glue on an exterior surface of the material (specification page 1, lines 5-9; page 4, lines 4-9); and placing the material within a mould so that the glue forms a tack with the mould (specification page 4, lines 20-23; page 5, lines 3-29; page 7, lines 14-20).

(vi) Grounds of Rejection to be Reviewed on Appeal

A first ground of rejection presented for review on appeal is whether claims 1-4, 6, 8 and 9 were properly rejected under 35 U.S.C. 102(b) as being anticipated by Fowler (US 6447705).

A second ground of rejection presented for review on appeal is whether claims 1, 4 and 5 were properly rejected under 35 U.S.C. 102(b) as being anticipated by Flonc (US 5080851).

A third ground of rejection presented for review on appeal is whether claims 1-6, 8 and 9 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Fowler.

A fourth ground of rejection presented for review on appeal is whether claims 1, 4 and 5 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Flonc.

A fifth ground of rejection presented for review on appeal is whether claims 2, 3, 8 and 9 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Flonc as applied to claims 1,4 and 5 above, and further in view of Fowler.

KLETHY 10/586,483
Attorney Docket No. 0540-1028

A sixth ground of rejection presented for review on appeal is whether claims 1,4-6, 11 and 12 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Swift (WO 94/26505 A 1) in view of Adams (US 4349599) and Flonc.

A seventh ground of rejection presented for review on appeal is whether claims 2, 3, 8-10 and 13 were properly rejected under 35 U.S.C. 103(a) as being unpatentable over Swift in view of Adams and Flonc as applied to claims 1, 4-6, 11 and 12, and further in view of Fowler.

(vii) Arguments

Arguments Concerning the First Ground of Rejection

A first ground of rejection concerns claims 1-4, 6, 8 and 9 being rejected as anticipated by Fowler. The claims stand together.

As to claim 1, the question therefore is whether Fowler, in the context of a process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices, discloses:

- A) preparing a fiber-based material, and
- B) depositing a repositionable glue on at least one exterior surface of the material thus obtained.

A) preparing a fiber-based material

On page 5 of the Official Action, first paragraph, the Examiner admits that "Fowler does not explicitly recite preparing the fiber-based material,".

The anticipation rejection fails based on this admission.

B) depositing a repositionable glue on at least one exterior surface of the material thus obtained

Fowler discloses a process for Resin Transfer Molding (RTM) (See the Brief Description of the Prior Art discussion). The objective of Fowler is to provide a

preform in which there is a binder with a catalyst to bind fibers.

In the Brief Description of the Prior Art discussion, Fowler discusses Flonc (US 5080851) as disclosing a method to manufacture a complex composite article. This complex composite article is made of two layers bounded together by a hot melt glue, located therebetween, so that the new double layers raw material may be cut at a desired size.

Thereafter, each cut portion may be formed by heating the cut portion to melt the glue, the cut portion is shaped on a mandrel as desired and when the glue resolidifies the portion keeps the shape of the mandrel. This method is very interesting in obtaining a shaped portion of a multilayered armature before introducing said portion in a mold to manufacture a composite piece by introducing resin.

In the Fowler "Summary of Invention" passages Column 2, lines 13-30 and lines 55-67 addresses the problem of how to shape a portion of armature made of several layers.

Fowler teaches using a thermoplastic catalyst-containing resin, where, when the two sheets are applied one

on the other, under a hot press on a mandrel, the polymerization reaction begins to provide a preform.

Fowler column 3, lines 1-17 discloses the manufacturing of a composite product by introducing the shaped preform in a mold, closing the mold and flowing resin in the mold.

Thus, Fowler teaches how to conform an armature being placed in a mould. The Fowler solution is to have at least two layers bounded together to be able to move one from the other to conform them on a mandrel and to keep these layers in this shaped form of the mandrel.

In general, in the present invention, the problem being solved is how to maintain an armature being placed in a mould to have the placed armature correctly positioned and to further maintain the correct positioning while closing of the mould.

The solution of the present invention is the recited step of depositing a repositionable glue on at least one exterior surface of the material thus obtained. The repositionable glue functions to form a glue tack with the mould.

Fowler does not teach or suggest such a step.

Page 3, lines 3-5 of the Official Action states that "Regarding the new limitation of depositing the glue on an exterior surface, Fowler applies the glue by spraying. Clearly the glue is deposited on an exterior surface when applied by spraying."

The rejection fails because the glue is not sprayed on the exterior surface of the prepared fiber-based material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices, as recited.

In Fowler, there is no glue deposited on the exterior surface of the material. Rather, the glue is deposited on one face of each layer to bind the layers face-to-face as jelly binds two slices of bread in a jelly sandwich. As such, the glue is in the middle of the sandwich and not on the exterior as recited.

Before introducing the obtained Fowler product into the mould, there is no glue on any exterior surface of the material/sandwich.

Thus, what Fowler teaches is to use glue on the interior surface of the material layers to obtain an adhered-together sandwich product.

Further, there would be no reason to put a glue on the exterior of the obtained sandwich product as the Fowler

mould walls are shaped to the final product. Adding glue to the exterior surface would be a disadvantage in Fowler.

Still further, Fowler does not disclose the use of a repositionable glue (Flonc also does not disclose a repositionable glue).

Rather, Fowler discloses the use of a hot-melt with solidification glue or a catalyzed resin. Once applied, the glue is not tacky and is accordingly not a repositionable glue.

MPEP § 2111 provides for guidance in giving the claims their broadest reasonable interpretation consistent with the specification. In actually analyzing the claims, the Examiner fails to properly interpret the claims' terms. More specifically, the Examiner gives the meaning of the terms in the claims a meaning inconsistent with in the specification.

The MPEP § 2111 guidance does not authorize that the claim terms can take on any conceivable meaning the Examiner may create. The Examiner is limited such that the broadest reasonable interpretation of the claims is consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

Within these requirements, Fowler does not disclose depositing a repositionable glue on at least one exterior surface of the obtained fiber-based material.

Thus, the claim 1 invention is both novel and non-obvious over Fowler. The anticipation rejection is therefore improper.

Arguments Concerning the Second Ground of Rejection

A second ground of concerns claims 1, 4 and 5 being rejected as anticipated by Flonc. The claims stand together.

A) preparing a fiber-based material

On page 5 of the Official Action, the Examiner admits that "Flonc does not explicitly recite preparing the fiber-based material,".

The anticipation rejection fails based on this admission.

B) depositing a repositionable glue on at least one exterior surface of the material thus obtained

The rejection (pages 3, last two lines) states that "Flonc teaches a method of making a fiber reinforced part wherein a prepared fibrous material is sprayed with a repositionable adhesive (column 3, lines 10-38)".

Appellants respectfully disagree. Although there is disclosure of spraying, the spraying is not of a repositionable adhesive and is not on the exterior surface of the material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices.

The column 3, lines 10-38 passage discloses (emphasis added):

Generally the amount of solid resin applied to the layers is from about 1-15 percent by weight, preferably 1-5 percent, applied per layer. The resin may be sprinkled or sprayed onto each layer. ...

Referring again to FIG. 1, the layers 1 and resin 4 are heated while on the surface 2 to melt the solid resin and then cooled to bond the layers together to form a storable bonded preform 3. Thus, the preform can be massed produced in a standard size and thickness and then later cut and shaped for forming complex parts.

A unique advantage of the present invention, is that the layers may be separated or formed, without heat, as the resolidified resin is somewhat frangible. In the raw state, most fabrics are quite pliable and easily drape to conform to complex shapes without splicing. Using thermoplastics, once formed, the preform cannot be tailored without reheating, or tearing will occur. Using the present invention, the flat preform may be formed, cold, using hand pressure or the equivalent, to match the contours of a 3-dimensional part. As the preform is manipulated, the bond releases in that area, without damage to the fibers, and while still preventing fraying at the ends of the sheets. After forming, the preform may be reheated to reinitiate bonding. This procedure greatly enhances formation of complex composite parts.

Flonc is discussed in Fowler and is only different from Fowler in the glue being used. However, in Flonc, there is no glue deposited on the exterior surface of the material

defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices, as recited.

In the Flonc case, the preform as described has necessarily several layers superimposed. These layers are bounded together by spraying the surface of each layer. The glue is a meltable thermosetting resin. After these layers have been bound together, they are conformed by heating the meltable glue. That heating is required demonstrates that the glue is not a repositionable glue.

The difference between Fowler and Flonc is that in Flonc the resin used to bind layers is not introduced deep into the preform but only placed on the surface. This meltable glue is compatible with the main resin used for injection and for manufacturing the final composite piece.

As with Fowler, the glue is used to adhere the layers together and is not used on an exterior surface of the the material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices.

Also, as with Fowler, the Flonc glue is not disclosed as being repositionable. Indeed, the glue/binder, after the layers have been cooled, is solid. Further, there is no need in Flonc to apply repositionable glue on an exterior surface of the formed armature material.

KLETHY 10/586,483
Attorney Docket No. 0540-1028

Thus, the claim 1 invention is also both novel and non-obvious over Flonc.

The anticipation rejection is therefore improper.

Arguments Concerning the Third Ground of Rejection

The third ground of rejection concerns claims 1-6, 8 and 9 being rejected as obvious over Fowler. The claims stand together.

Now, the question as to claim 1 is whether Fowler, in the context of a process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices, teaches or suggest:

- A) preparing a fiber-based material, and
- B) depositing a repositionable glue on at least one exterior surface of the material thus obtained.

A) preparing a fiber-based material

On page 5 of the Official Action, first paragraph, the Examiner admits that "Fowler does not explicitly recite preparing the fiber-based material,".

The Examiner argues that this step is obvious to one skilled in the art. However, the Examiner is incorrect insofar as one skilled in the art, wanting to obtain a preform (as taught by Fowler), would not modify the approach of Fowler.

B) depositing a repositionable glue on at least one exterior surface of the material thus obtained

The obviousness rejection does not discuss this step. As argued above, Fowler fails to disclose this step.

Fowler discloses a process for Resin Transfer Molding (RTM) (See the Brief Description of the Prior Art discussion). The objective of Fowler is to provide a preform in which there is a binder with a catalyst to bind fibers.

In the Brief Description of the Prior Art discussion, Fowler discusses Flonc (US 5080851) as disclosing a method to manufacture a complex composite article. This complex composite article is made of two layers bounded together by a hot melt glue, located therebetween, so that the new double layers raw material may be cut at a desired size.

Thereafter, each cut portion may be formed by heating the cut portion to melt the glue, the cut portion is shaped on a mandrel as desired and when the glue resolidifies the portion keeps the shape of the mandrel. This method is very interesting in obtaining a shaped portion of a multilayered armature before introducing said portion in a mold to manufacture a composite piece by introducing resin.

In the Fowler "Summary of Invention" passages Column 2, lines 13-30 and lines 55-67 addresses the problem of how to shape a portion of armature made of several layers.

Fowler teaches using a thermoplastic catalyst-containing resin, where, when the two sheets are applied one on the other, under a hot press on a mandrel, the polymerization reaction begins to provide a preform.

Fowler column 3, lines 1-17 discloses the manufacturing of a composite product by introducing the shaped preform in a mold, closing the mold and flowing resin in the mold.

Thus, Fowler teaches how to conform an armature being placed in a mould. The Fowler solution is to have at least two layers bounded together to be able to move one from the other to conform them on a mandrel and to keep these layers in this shaped form of the mandrel.

In general, in the present invention, the problem being solved is how to maintain an armature being placed in a mould to have the placed armature correctly positioned and to further maintain the correct positioning while closing of the mould.

The solution of the present invention is the recited step of depositing a repositionable glue on at least one exterior surface of the material thus obtained.

Fowler does not teach or suggest such a step.

Page 3, lines 3-5 of the Official Action states that "Regarding the new limitation of depositing the glue on an exterior surface, Fowler applies the glue by spraying. Clearly the glue is deposited on an exterior surface when applied by spraying."

The rejection fails because the glue is not sprayed on the exterior surface of the prepared fiber-based material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices, as recited.

In Fowler, there is no glue deposited on the exterior surface of the material. Rather, the glue is deposited on one face of each layer to bind the layers face-to-face as jelly binds two slices of bread in a jelly sandwich. As such, the glue is in the middle of the sandwich and not on the exterior as recited.

Before introducing the obtained Fowler product into the mould, there is no glue on any exterior surface of the material/sandwich.

Thus, what Fowler teaches is to use glue on the interior surface of the material layers to obtain an adhered-together sandwich product.

Further, there would be no reason to put a glue on the exterior of the obtained sandwich product as the Fowler mould walls are shaped to the final product. Adding glue to the exterior surface would be a disadvantage in Fowler.

Still further, Fowler does not disclose the use of a repositionable glue. Rather, Fowler discloses the use of a hot-melt with solidification glue or a catalyzed resin.

MPEP § 2111 provides for guidance in giving the claims their broadest reasonable interpretation consistent with the specification. In actually analyzing the claims, the Examiner fails to properly interpret the claims' terms. More specifically, the Examiner gives the meaning of the terms in the claims a meaning inconsistent with in the specification.

The MPEP § 2111 guidance does not authorize that the claim terms can take on any conceivable meaning the Examiner may create. The Examiner is limited such that the broadest reasonable interpretation of the claims are consistent with the interpretation that those skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

Within these requirements, Fowler does not disclose depositing a repositionable glue on at least one exterior surface of the obtained fiber-based material.

Thus, the claim 1 invention is both novel and non-obvious over Fowler.

The obviousness rejection is therefore also improper.

Arguments Concerning the Fourth Ground of Rejection

A fourth ground of concerns claims 1, 4 and 5 being rejected as obvious over Flonc. The claims stand together.

Now, the question as to claim 1 is whether Flonc, in the context of a process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices, teaches or suggest:

- A) preparing a fiber-based material, and
- B) depositing a repositionable glue on at least one exterior surface of the material thus obtained.

A) preparing a fiber-based material

On page 5 of the Official Action, first paragraph, the Examiner admits that "Flonc does not explicitly recite preparing the fiber-based material,".

The Examiner argues that this step is obvious to one skilled in the art. However, the Examiner is incorrect insofar as one skilled in the art, wanting to obtain a preform (as taught by Fowler and Flonc), would not modify the approach of Flonc.

B) depositing a repositionable glue on at least one exterior surface of the material thus obtained

The obviousness rejection does not discuss this step. As argued above, Flonc fails to disclose this step.

The anticipation rejection (pages 3, last two lines) states that "Flonc teaches a method of making a fiber reinforced part wherein a prepared fibrous material is sprayed with a repositionable adhesive (column 3, lines 10-38)".

Appellants respectfully disagree.

Although there is disclosure of spraying, the spraying is not of a repositionable adhesive and is not on the exterior surface of the material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices.

The column 3, lines 10-38 passage discloses (emphasis added):

Generally the amount of solid resin applied to the layers is from about 1-15 percent by weight, preferably 1-5 percent, applied per layer. The resin may be sprinkled or sprayed onto each layer. ...

Referring again to FIG. 1, the layers 1 and resin 4 are heated while on the surface 2 to melt the solid resin and then cooled to bond the layers together to form a storable bonded preform 3. Thus, the preform can

be massed produced in a standard size and thickness and then later cut and shaped for forming complex parts.

A unique advantage of the present invention, is that the layers may be separated or formed, without heat, as the resolidified resin is somewhat frangible. In the raw state, most fabrics are quite pliable and easily drape to conform to complex shapes without splicing. Using thermoplastics, once formed, the preform cannot be tailored without reheating, or tearing will occur. Using the present invention, the flat preform may be formed, cold, using hand pressure or the equivalent, to match the contours of a 3-dimensional part. As the preform is manipulated, the bond releases in that area, without damage to the fibers, and while still preventing fraying at the ends of the sheets. After forming, the preform may be reheated to reinitiate bonding. This procedure greatly enhances formation of complex composite parts.

Flonc is discussed in Fowler and is only different from Fowler in the glue being used. However, in Flonc, there is no glue deposited on the exterior surface of the material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices, as recited.

In the Flonc case, the preform as described has necessarily several layers superimposed. These layers are bounded together by spraying the surface of each layer. The glue is a meltable thermosetting resin. After these layers

have been bound together, they are conformed by heating the meltable glue. The glue that is sprayed in Flonc does not remain tacky (as is clear since it must be reheated to be effective as a glue) and therefore cannot be considered a repositionable glue.

The difference between Fowler and Flonc is that in Flonc the resin used to bind layers is not introduced deep into the preform but only placed on the surface. This meltable glue is compatible with the main resin used for injection and for manufacturing the final composite piece.

As with Fowler, the glue is used to adhere the layers together and is not used on an exterior surface of the material defining of a fiber-based armature to be embedded in a matrix or a mixture of matrices.

Also, as with Fowler, the Flonc glue is not disclosed as being repositionable. Indeed, the glue/binder, after the layers have been cooled, is solid. Further, there is no need in Flonc to apply repositionable glue on an exterior surface of the formed armature material.

Thus, the claim 1 invention is also both novel and non-obvious over Flonc.

The obviousness rejection is therefore also improper.

Arguments Concerning the Fifth Ground of Rejection

The fifth ground of concerns claims 2, 3, 8 and 9 being rejected as being obvious over Flonc in further in view of Fowler.

These claims all depend from claim 1.

These claims stand together.

Claim 1 is patentable over Flonc. Therefore these claims are patentable at least for depending from a patentable claim. Appellants therefore need not further argue this rejection.

Arguments Concerning the Sixth Ground of Rejection

The sixth ground of rejection concerns claims 1, 4-6, 11 and 12 being rejected as obvious over Swift in view of Adams and Flonc.

Claims 1 and 4-6 stand together. Claims 1, 11, and 12 stand independently of each other.

Claim 1

Although Swift does disclose (page 3, first full paragraph) securing a mat of fibrous reinforcement to a reverse face of a mould with an appropriate adhesive, e.g., a heat-activated adhesive, the Examiner admits that Swift does not disclose the recited repositionable glue (Official Action page 7, lines 3-4).

The rejection relies on Adams to teach the use of repositionable glue during moulding of articles.

However, Adams also does not disclose repositionable glue and rather teaches another heat-activated adhesive. Adams discloses a textile, such as a tape, having an adhesive coating. This coated tape is disclosed as being used to prevent movement of reinforcing material (Abstract).

Adams teaches (Summary of the Invention) "the use of a textile with adhesive ... the adhesive being compatible

with the laminating resin..., for example, in the form of a tape, can be used to stick two pieces of reinforcement together or to anchor a piece of reinforcement or an insert to a particular area of the moulding" (emphasis added).

In the Summary of the Invention, Adams further teaches (emphasis added) that "The adhesive composition used must be compatible with the laminating resin so that it becomes an integral part of the structure without adversely affecting its performance. For example a coating of a pressure sensitive hot melt adhesive based on an ethylene/vinyl acetate copolymer is suitable when the laminating resin is an unsaturated polyester. It is desirable that the adhesive should be tacky or in some other way function to hold the textile and the surface to which it is applied immediately these are put in contact."

A hot melt adhesive anchors the reinforcement immediately while the adhesive is hot. However, once the reinforcement is anchored, the adhesive become hard upon cooling. If one wants to move the piece of reinforcement, the hot melt adhesive must be heated. The Examiner admits the re-heating requirement (Official Action page 7, lines 6-11 when offering Flonc for this very point).

Therefore, the Examiner acknowledges that Adams does not disclose a repositionable glue.

Flonc also discloses a heat-activated glue and does not disclose a repositionable glue. Therefore, Flonc does not cure the defect of the Swift and Adams.

The Examiner acknowledges (Official Action page 7, lines 3-4) that Swift's heat-activated adhesive does not satisfy the claim's repositionable glue recitation, and similarly the Examiner must also acknowledge that the hot melt adhesive of Adams and/or Flonc do not satisfy the claims' repositionable glue recitation.

Since none of the references suggest the use of depositing a repositionable glue on at least one exterior surface of the obtained fiber-based material adapted to be embedded in a matrix or a mixture of matrices, the claim is non-obvious and the rejection improper.

Claim 11

As discussed with respect to claim 1, Swift does not disclose the recited repositionable glue on an exterior surface of the prepared fiber-based armature.

Swift does not teach placing the armature in a mould with the repositionable glue holding the armature in position within the mould.

Since neither Adams nor Flonc teach a repositionable glue, the combination of these references do not teach a repositionable glue.

Indeed, the references teach heating a hot melt glue, when applied the glue is no longer tacky and must be re-heated to again be effective as a glue. Therefore, there is no teaching to use, e.g., by spraying or otherwise, a repositionable glue so as to provide a glue tack for the armature material within the mould.

Since none of the references suggest the use of depositing a repositionable glue, the claim is non-obvious and the rejection improper.

Claim 12

Again, as discussed with respect to claim 1, Swift does not disclose the recited deposition of a repositionable glue on an exterior surface of the prepared fiber-based armature material. Swift also does not disclose the recited placing the material within a mould so that the repositionable glue forms a tack with the mould.

Since neither Adams nor Flonc teach a repositionable glue, the combination of these references do not teach a repositionable glue.

Indeed, the references teach away from the present invention in that these references teach heating a hot melt glue, where such an applied glue is no longer tacky and must be re-heated to be effective as a glue.

These glues would not result in a material that when placed within the mould would form a tack within the mould.

Therefore, there is no teaching to use, e.g., by spraying or otherwise, a repositionable glue so as to provide a glue tack for the armature material within the mould.

Since none of the references suggest the use of depositing a repositionable glue which forms a tack with the

KLETHY 10/586,483
Attorney Docket No. 0540-1028

mold, when applied to the exterior surface of the armature material being placed in the mould, the claim is non-obvious and the rejection improper.

Arguments Concerning the Seventh Ground of Rejection

A seventh ground of rejection concerns claims 2, 3, 8-10 and 13 being rejected as obvious over Swift in view of Adams and Flonc as applied to claims 1, 4-6, 11 and 12, and further in view of Fowler.

Claims 2, 3, and 8-10 depend from claim 1.

Claim 13 depends from claim 12.

Each of claims 1 and 12 are patentable for the reasons identified earlier in this brief.

Therefore these claims are patentable at least for depending from a patentable claim. Accordingly, Appellants need not further argue this rejection.

KLETHY 10/586,483
Attorney Docket No. 0540-1028

Conclusion

The Appellants have demonstrated that the Examiner has failed to successfully show that the rejected claims are either anticipated or obvious. Reversal of the rejections is therefore earnestly requested.

Please charge the requisite Appeal Brief fee in the amount of \$270 to our credit card.

Respectfully submitted,

YOUNG & THOMPSON

By /Roland E. Long, Jr./
Roland E. Long, Jr., Reg. No. 41,949
Attorney for Appellants
209 Madison Street
Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

November 8, 2010

REL/fb

(viii) **Claims Appendix**

LISTING OF CLAIMS:

1. (previously presented) Process for the production of a fiber-based armature particularly adapted to be embedded in a matrix or a mixture o matrices, comprising the steps of:

preparing a fiber-based material, and
depositing a repositionable glue on at least one exterior surface of the material thus obtained.

2. (previously presented) Process for the production of a fiber-based armature according to claim 1, further comprising a step of emplacing a removable separator on the surface having received said layer of repositionable glue at the location of the repositionable glue.

3. (previously presented) Process for the production of a fiber-based armature according to claim 1, further comprising a step of cutting off in sheets or rolling up.

4. (previously presented) Process for the production of a fiber-based armature according to claim 1, further comprising a step of selecting the repositionable glue by adjusting its mechanical properties such that it will be compatible with the matrix used without giving rise to pollution.

5. (previously presented) Process for the production of a fiber-based armature according to claim 1, wherein the repositionable glue is applied to the exterior surface by spraying.

6. (previously presented) Process for the production of a fiber-based armature according to claim 1, wherein the glue is selected from hot melt glues.

7. (canceled)

8. (previously presented) Process for the production of a fiber-based armature according to claim 2, further comprising a step of cutting off in sheets or rolling up.

9. (previously presented) Process for the production of a fiber-based armature according to claim 2, further comprising a step of selecting the repositionable glue by adjusting its mechanical properties such that it will be compatible with the matrix used without giving rise to pollution.

10. (previously presented) The process for the production of a fiber-based armature according to claim 2, comprising the further steps of:

removing the separator from the glue to expose the glue;

using the exposed glue to maintain a position of the material within a mould by the glue forming a tack with the mould; and

within the mould, injecting the material with resin.

11. (previously presented) A process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices, comprising the steps of:

preparing a fiber-based armature;

depositing a repositionable glue on an exterior surface of the armature;

placing the armature in a mould with the glue holding the armature in position within the mould; and

injecting resin to flow through fibers of the armature.

12. (previously presented) A process for the production of a fiber-based armature to be embedded in a matrix or a mixture of matrices, comprising the steps of:

preparing a fiber-based material;

depositing a repositionable glue on an exterior surface of the material; and

placing the material within a mould so that the glue forms a tack with the mould.

13. (previously presented) The process for the production of a fiber-based armature according to claim 12, comprising the further steps of:

pressing a removable separator on the deposited repositionable glue;

removing the separator from the exterior surface to expose the glue prior to placing the material within the mould so that the glue forms the tack with the mould; and

injecting resin to flow through fibers of the material.

KLETHY 10/586, 483
Attorney Docket No. 0540-1028

(ix) **Evidence Appendix**

None.

KLETHY 10/586, 483
Attorney Docket No. 0540-1028

(x) **Related Proceedings Appendix**

None.